



## INFORMATION DISCLOSURE STATEMENT

Applicant : Steven F. Bolling, et al.  
App. No : 10/729,026  
Filed : December 5, 2003  
For : IMPLANTABLE HEART ASSIST SYSTEM  
AND METHOD OF APPLYING SAME  
Examiner : Carl H. Layno  
Art Unit : 3762

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application is an Information Disclosure Statement by Applicant (PTO/SB/08 equivalent) listing 109 references to be considered by the Examiner. Also enclosed are 42 foreign patent references and/or non-patent literature as listed on the Information Disclosure Statement.

This Information Disclosure Statement is being filed before the mailing date of a final action and before the mailing of a Notice of Allowance. This Statement is accompanied by the fees set forth in 37 C.F.R. § 1.17(p). The Commissioner is hereby authorized to charge any additional fees which may be required or to credit any overpayment to Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: March 14, 2005

By: Andrew M. Douglas

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Multiple sheets used when necessary)

SHEET 1 OF 5

Application No.	10/729,026
Filing Date	December 5, 2003
First Named Inventor	Steven F. Bolling, et al.
Art Unit	3762
Examiner	Carl H. Layno
Attorney Docket No.	FORFLOW.1CP6C1

## U.S. PATENT DOCUMENTS

Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name of Patentee or Applicant	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
1	3,938,530	2/1976	Santomieri	
2	4,000,739	1/1977	Stevens	
3	4,134,402	1/16/1979	Mahurkar	
4	4,385,631	5/31/1983	Uthmann	
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6	4,411,655	10/1983	Schreck	
7	4,447,236	5/08/1984	Quinn	
8	4,540,402	9/10/1985	Aigner	
9	4,543,087	9/24/1985	Sommercom, et al.	
10	4,692,141	9/08/1987	Mahurkar	
11	4,798,591	1/1989	Okada	
12	4,857,062	8/1989	Russell	
13	4,925,452	5/15/1990	Melinyshyn, et al.	
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16	4,985,014	1/1991	Orejola	
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18	5,011,469	4/30/1991	Buckberg, et al.	
19	5,041,098	8/20/1991	Loiterman, et al.	
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21	5,087,247	2/11/1992	Horn, et al.	
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23	5,129,883	7/14/1992	Black	
24	5,211,546	5/18/1993	Issacson, et al.	
25	5,250,036	10/1993	Farivar	
26	5,279,551	1/1994	James	
27	5,318,518	6/7/1994	Plechinger, et al.	
28	5,336,205	8/1994	Zenzen, et al.	
29	5,378,230	1/03/1995	Mahurkar	

Examiner Signature

Date Considered

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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U.S. PATENT DOCUMENTS					
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	30	5,403,291	4/04/1995	Abrahamson	
	31	5,405,329	4,1995	Durand	
	32	5,417,705	5/1995	Haber, et al.	
	33	5,453,084	9/26/1995	Moses	
	34	5,472,417	12/05/1995	Martin, et al.	
	35	5,486,159	1/23/1996	Mahurkar	
	36	5,522,800	6/4/1996	Crocker	
	37	5,533,957	7/9/1996	Aldea	
	38	5,536,250	7/16/1996	Klein, et al.	
	39	5,542,937	8/6/1996	Chee, et al.	
	40	5,554,136	9/10/1996	Luther	
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	58	6,167,765	1/2001	Weitzel	

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	59	6,287,608	9/11/2001	Levin, et al.	
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	64	6,749,598	6/15/2004	Keren, et al.	
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Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1	Publication Date MM-DD-YYYY	Country	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T <sup>1</sup>
	68	0 533 432 A1	3/24/1993	EPO		
	69	0 711 574 A1	5/15/1996	EPO		
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	72	JP 08257001 A	10/1996	Japan		
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	74	WO 96/18358	6/20/1996	PCT		
	75	WO 98/34676	8/13/98	PCT		
	76	WO 99/16498	4/1999	PCT		
	77	WO 99/21605	5/1999	PCT		
	78	WO 99/42156	8/26/1999	PCT		
	79	WO 99/59652	11/25/1999	PCT		
	80	WO 00/76577	12/21/2000	PCT		
	81	WO 02/064204 A1	9/2001	PCT		

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### NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>1</sup>
	82	Aranki, S. et al. Femoral Veno-Arterial Extracorporeal Life Support With Minimal or No Heparin. Ann Thorac Surg 1993; 56: 149-55	
	83	Birtwell, W. et al. The evolution of counterpulsation techniques. Med Instrum 1976; 10(5): 217-23	
	84	Bonchek, L. et al. Direct Ascending Aortic Insertion of the "Percutaneous" Intraaortic Balloon Catheter in the Open Chest: Advantages and Precautions. Ann Thorac Surg 1981; 32(5): 512-14	
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	86	Clark, R. E. Progress in the clinical application of the AB-180 circulatory support system. Journal of Circulatory Support (1998) Vol. 1, No. 1, 21-26	
	87	Clark, R. E. et al. Future devices and directions. Progress in Cardiovascular Diseases, 43(1) (July/August), 2000: 95-100	
	88	Clark, R. E. et al. Left Ventricular Support With the Implantable AB-180 Centrifugal Pump in Sheep With Acute Myocardial Infarction. ASAIO 1998; 44(6): 804-11	
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	90	Dembitsky, W. Briding from acute to chronic devices. Ann Thorac Surg 1999; 68: 724-28	
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	93	Griffin, W. P. et al. AB-180 Circulatory Support System: Summary of Development and Phase I Clinical Trial. ASAIO 1998; 44(5): M719-24	
	94	Jaski, B. et al. Anterograde Perfusion in Acute Limb Ischemia Secondary to Vascular Occlusive Cardiopulmonary Support. Cath and Cardiovasc Diag 1995; 35: 373-76	
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	96	Magovern, G. Nonpulsatile Circulatory Support: Techniques of Insertion. Ann Thorac Surg 1993; 55: 266-72	
	97	Magovern, J. A. et al. Clinical results with the AB-180 left ventricular assist device. Ann Thorac Surg 2001; 71: S121-24	
	98	Martin, J. et al. MEDOS HIA-VAD Biventricular Assist Device for Bridge to Recovery in Fulminant Myocarditis. Ann Thorac Surg 1997; 1145-46	
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	101	Pacella, J. J. et al. Modified Fabrication Techniques Lead to Improved Centrifugal Blood Pump Performance. ASAIO 1994; 40: M767-72	
	102	Reddy, R. C. et al. End Organ Function With Prolonged Nonpulsatile Circulatory Support. ASAIO 1995; 41: M547-51	
	103	Reedy, J. et al. Mechanical cardiopulmonary support for refractory cardiogenic shock. Heart & Lung 1990; 19(5): 514-23	
	104	Savage, E. B. et al. The AB-180 Circulatory Support System: Summary of Development and Plans for Phase I Clinical Trial. Ann Thorac Surg 1999; 68: 768-74	
	105	Sharony et al. Cardiopulmonary Support and Physiology- The Intra-Aortic Cannula Pump: A Novel Assist Device for the Acutely Failing Heart. The Journal of Thoracic and Cardiovascular Surgery, Nov. 1992, Vol. 118, No. 5, pp. 924-929	
	106	Sharony, R. et al. Right heart support during off-pump coronary artery surgery—a multi-center study. Heart Surg Forum. 2002;5(1):13-6.	
	107	Takagaki et al. A Novel Miniature Ventricular Assist Device for Hemodynamic Support. ASAIO Journal 2001, pp. 412-416	
	108	Wenger, R., et al. Flow dynamics of peripheral venous catheters during extracorporeal membrane oxygenation with a centrifugal pump. J Thora Cardiovasc Surg 1988; 96:478-84	
	109	Westaby, S. et al. Mechanical bridge to recovery in fulminant myocarditis. Ann Thorac Surg 2000; 70: 278-282	

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